

## SUBJECT INDEX

- Accounting for interest and taxes, 40
- Air lift, Camp Grant, 104
  - Savannah, 255
- Alabama, water supply standard, 50
- Alum, method of using, St. Louis, 281
- American Water Works Association,
  - advantages of a local section, 167
  - amendments to the constitution, 355
  - annual convention, 363
- Bacteria, degree and nature of removal in filters, 272
  - differentiation of species of the colon-aerogenes family, 26
  - notes on the presumptive test for B. coli, 168
  - practicability of bacterial standards of quality of water, 198
  - reduction at Council Grove, 443
  - standards for water, 49, 198
- California, water supply standards, 51
- Calking lead wool and cast lead joints, 10
- Camp Grant water supply, 100
- Cantonment water supplies, Camp Custer, 229
  - Camp Grant, 100
  - sanitary aspects, 232
- Carbon dioxide, removal from water, 185
- Catskill water supply system, 91
- Chloramine, 63
- Chlorination, chloramine and, 63
  - Minnesota problems, 132
  - St. Louis, 284
- City planning, report of committee, 1
- Coagulant, successive applications at Council Grove, 438
- Coal, burning small sizes of anthracite, 401
  - purchasing under Fuel Administration, 402
- Cocks and services, head lost in corporation, 240
  - joints, 407
- Comments, 193, 395
- Committee reports, amendments to the constitution, 355
- Committee reports—*continued*
  - city planning, 1
  - executive, 375
  - finance, 376
  - mechanical analysis of sand, 345
  - priorities, 194
  - publication, 380
  - sanitary drinking fountains, 110
- Concrete pressure pipe, reinforced, 419
- Constitution, amendments, 345
- Contracts, dehydrated, 404
- Convention, St. Louis, 363
- Council Grove, Kan., water treatment, 438
- Dams, drainage and sectional construction of concrete, 96
- Deaths, 84, 191, 454
- Dehydrated contracts, 404
- Differentiation of bacteria of the colon-aerogenes family, 26
- Drawings for photo-engraving, 400
- Drinking fountains, sanitary, 110
- Executive committee, report, 375
- Filtration, laboratory control methods, 223
  - nature of bacterial removal by, 272
  - significance of black sand, 425
  - St. Louis, 284
- Finance committee, report, 376
- Fish life and water pollution, 434
- Flag, service, 363
- Fountains, sanitary drinking, 110
- Gate houses, architectural treatment, 1
- Head lost in corporation cocks and services, 240
- High-pressure fire-service pipe leakage, 44
- Illinois section, 190, 371
- Inspection to prevent waste, 396
- Interest, accounting for, 40
- Iron, removal from water, 185
- Iowa, water supply standards, 51

- Joints in pipes, flanged, 410  
   lead wool and cast lead, 10  
   metalium, 174  
   water tight for vitrified pipe, 16  
 Journal, 193, 381, 395  
  
 Labor-saving machinery, 172, 301  
 Labor under war conditions, 303  
 Laboratories of American water works, 133  
   practice in B. coli tests, 201  
 Lead wool, 10  
 Lead pipe couplings, 407  
 Leakage, vitrified pipe under low head, 15  
   Catskill aqueduct tunnels, 97  
   high-pressure fire-service mains, 44  
   services, 408  
 Lime, methods of use, St. Louis, 280  
 Little Falls, Minn., water works, 165  
 Local sections of the Association, advantages, 167  
 Lowering ground water levels in trenches, 36  
  
 Manganese, removal from water, 185  
 Manifold for 48-inch mains, St. Louis, 288  
 Mankato, Minn., artesian wells, 163  
 Maps, distribution system, St. Louis, 414  
   Passaic Water Company, 433  
   New York, 450  
 Maryland, water supply standards, 51  
 Membership changes, 84, 190, 454  
 Metalium, 174  
 Meters, methods of determining and plotting capacities, 120  
   results of use at Oak Park, 263  
 Minneapolis, centrifugal pumps, 118  
 Minnesota, section, 83  
   water standards, 50  
 Montana, water standard, 51  
  
 New members, 84, 190, 454  
 New York, N. Y., Catskill water supply system, 91  
   leaks form high-pressure fire-service mains, 44  
 New York section, 83  
  
 Oak Park, Ill., water waste elimination, 263  
 Obituary notices, 84, 191, 454  
 Office records, distribution system, New York, 448  
   Passaic Water Company, 429  
   St. Louis, 412  
 Ottawa, P. Q., chloramine treatment, 78  
  
 Pipe, cast iron, prices and depreciation, 145  
   incrustation and tuberculation, 147  
   tentative draft of proposed standard specifications, 385  
 Pipe, high-pressure fire-service, leakage, 44  
 Pipe joints, flanged, 419  
   lead wool and cast lead, 10  
   metalium, 174  
   water tight for vitrified pipe, 16  
 Pipe, reinforced concrete pressure, 419  
 Pipe, service, loss of head in, 240  
   thawing frozen, 166  
 Pipe, steel, Catskill aqueduct, 96  
   deterioration of well casing at Mankato, 162  
   St. Louis, 300  
 Pipe, vitrified, leakage under low head, 15  
 Pipe, wood stave, 107  
 President's address, 250  
 Pressure tunnels, Catskill aqueduct, 97  
 Prices, cast iron pipe, 145, 313  
 Priorities for water works material, 194  
 Publication Committee report, 380  
 Publicity of water departments, 57, 62  
 Pumps, Camp Grant, 105  
   centrifugal, 115  
   recovering a lost deep-well pump, 142  
   St. Louis, 288, 293  
  
 Records, distribution system, Passaic Water Company, 429  
   New York, 448  
   St. Louis, 412  
 Recovering a pump lost in a deep well, 142  
 Reservoirs, landscape architecture about, 1  
 Roll of honor, 85, 191, 454  
  
 Sand, mechanical analysis, 345  
 Sanitary drinking fountains, 110  
 Sanitation, shipyard, 194, 230  
 Savannah, Ga., history of artesian water supply, 252  
 Screenchamber, new type, 181  
 Sections, advantages of local, 167  
   Illinois, 190, 371  
   Minnesota, 83  
   New York, 83  
 Sedimentation, St. Louis, 283  
 Service flag, 364  
 Service pipes, thawing frozen, 166  
   joints, 407

- Shipyard sanitation, 194  
Sieves and screens for sand, 347  
Siphons, inverted, Catskill aqueduct, 96  
Society affairs, 83, 190, 363  
Specification for cast iron pipe and fixtures, proposed, 385  
Standpipes, architectural treatment, 1  
St. Louis, double 48-inch manifold, 288  
    new 110-million gallon pump, 293  
    office records and maps, 412  
    proceedings of convention, 363  
    some aspects of chemical treatment, 279  
    work of distribution section, water division, 299  
Taxes, accounting for, 40  
Tidal interference with artesian wells, Savannah, 259  
Trenches, labor saving machinery for, 172  
    lowering ground water level, 36  
    thawing frozen ground for excavation, 301  
Tuberculation of cast iron pipe, 147  
Tunnels, Catskill aqueduct system, 96  
Virginia, water supply standard, 50  
Vitrified pipe, leakage under low head, 15  
War burdens of water works, 303  
Water, accounting for public uses, 40  
    pollution and fish life, 434  
Water Supply, Camp Grant, 100  
    cantonnments, 232  
    corrosive action on metals, 451  
    northern Illinois ground, 100  
    practicability of adopting standards for, 198  
Savannah, Ga., 252  
    standards and their improvement, 49  
    sulphur and iron in, 164  
Water treatment, chlorination and chloramine, 63  
    coagulant applied at successive stages of sedimentation, 438  
Minnesota problems, 132  
    removal of iron, manganese and carbon dioxide, 185  
St. Louis, 279  
Water waste, inspection to prevent, 396  
    prevention at Oak Park, 263  
Water works, Camp Grant, 100  
    laboratories, 133  
    management problems of small, 165,  
    war burdens of, 303  
Wells, artesian, Mankato, 163  
    artesian, Savannah, 253  
    Camp Grant, 102  
    lowering ground water in excavating by, 36  
    recovering a pump lost in a deep well, 142  
Writing for publication, 398  
Zeolites, for removing iron and manganese, 189

## AUTHOR INDEX

- ACKERMAN, J. WALTER, accounting for taxes, 41
- ALVORD, JOHN W., lowering ground water levels, 38
- APPLEBAUM, SAMUEL B., removal of iron, manganese and carbon dioxide, 189
- BARRETT, CHARLES F., incrustation of pipe, 157
- BARTOW, EDWARD, removal of iron and manganese, 188  
water supply standards, 61
- BIRDSALL, L. I., publicity for water departments, 62
- BLEISTEIN, BERNARD J., loss of head in corporation cocks and service pipes, 240
- BLOMQUIST, H. F., some features in artesian well construction in Mankato, 163
- BOHMAN, HENRY P., accounting for public water, 42
- BOWLES, LIEUT.-COL. JAMES T. B., sanitary aspect of the water supplies of army cantonments, 232
- BRUSH, WILLIAM W., accounting for interest and taxes, 40  
conservation of water supply by water waste prevention inspection, 396  
leakage from vitrified pipe used to convey water under a low head, 15  
lowering ground water levels, 37
- BURDICK, CHARLES B., water works at Camp Grant, 100
- CAPPELEN, F. W., advantages of a local section, 167
- CHESTER, J. N., tuberculation of pipe, 155
- CLARK, WILLIAM MANSFIELD, differentiation of bacteria of the colon aerogenes family, 26, 33
- Committees, amendments to the constitution, 355  
city planning, 1  
executive, 375  
finance, 376  
mechanical analysis of sand, 345  
priorities, 194  
publication, 380  
sanitary drinking fountains, 110  
war burdens of water works, 303
- CONANT, E. R., history of the artesian water supply of Savannah, 252
- CONNET, F. N., tuberculation of pipe, 161
- CUDDEBACK, A. W., memoranda of office records, 429  
what interests water works men most, 395
- DAILY, C. M., double 48-inch manifold, St. Louis, 288
- DAVIS, CARLETON E., burning small sizes of anthracite, 400  
the Journal, 193
- DAVIS, E. E., incrustation of pipe, 157
- DAY, L. A., new 110-million gallon pump, St. Louis, 293
- FLAHERTY, THOMAS E., office records of the St. Louis water division, distribution section, 412
- FOLEY, W. A., some phases of the work in the distribution section of the water division, St. Louis, 299
- FOLWELL, A. PRESCOTT, lowering ground water levels, 38
- GOODELL, JOHN M., coal, 402  
shipyard sanitation, 194  
writing for publication, 398
- GORDON, T. G., problems of a small water works plant, 165
- GRAF, A. V., some aspects of chemical treatment at the St. Louis water works, 279
- GREELEY, SAMUEL A., water supply and sanitation at government camps and shipyards, 229
- GREEN, F. W., differentiation of bacteria of the colon aerogenes family, 33  
water supply standards, 59
- GREENSFELDER, ALBERT P., dehydrated contracts, 404

- HAUCK, WILLIAM, records of installation and maintenance of water mains and appurtenances of the municipal distribution system of the city of New York, 448
- HERING, RUDOLPH, incrustation of pipe, 156
- HINMAN, JR., JACK J., American water works laboratories, 133
- HODGMAN, BURT B., prices and depreciation of cast iron pipe, 145
- HOWELL, R. B., accounting for interest and taxes, 40
- JENSEN, J. A., labor saving machinery, 172  
lead pipe couplings, 406
- JUDD, W. A., recovering a pump lost in a deep well, 142
- KIMBALL, FRANK A., accounting for public water, 43
- KIRK, CLARENCE L., lowering ground water levels, 36, 38
- KNOUSE, HOMER V., metalium, 174
- LANCE, JOHN H., new design of screen chamber, 181
- LEISEN, MAJOR T. A., president's address, 250
- LEVINE, MAX, notes on the presumptive test for *B. coli*, 168
- MACHEN, HENRY B., leaks from high-pressure fire-service mains, 44
- MAIN, GEORGE A., accounting for public water, 42  
incrustation of pipe, 156
- MATTE, H. P. T., water waste elimination at Oak Park, Ill., 263
- MAURY, DABNEY H., lowering ground water levels, 38
- MERIWETHER, COLEMAN, reinforced concrete pressure pipe, 419
- METCALF, LEONARD, price and depreciation of cast iron pipe, 158
- MOHLER, B. M., water purification problems, 132
- MORSE, ROBERT B. (with Abel Wolman), practicability of adopting standards of quality for water supplies, 198
- NELSON, FRED B., methods of determining and plotting meter capacities, 120
- ORCHARD, WM. J., water supply standards and their improvement, 49
- PARR, S. W., property of certain waters with reference to their action on metals, 451
- RACE, JOSEPH, chlorination and chloramine, 63  
differentiation of bacteria of the colon aerogenes family, 33  
removal of carbon dioxide, 188  
water supply standards, 61
- SHELFORD, VICTOR E., water pollution and fish life, 434
- SMITH, J. WALDO, Catskill water supply system, 91
- THOMAS, R. J., lead wool, 10
- TRIBUS, LOUIS L., water treatment at Council Grove, Kan., 438
- WELKER, J. E. (with C. C. Young), significance of black sands in filters, 425
- WESTON, ROBERT SPURR, removal of iron, manganese and carbon dioxide, 185
- WIGLEY, CHESTER G., water supply standards, 59
- WOLMAN, ABEL (with Robert Morse), practicability of adopting standards of quality for water supplies, 198  
preliminary analysis of the degree and nature of bacterial removal in filtration plants, 273
- YORK, E. C., centrifugal pumps, 115
- YOUNG, C. C. (with J. E. Welker), significance of black sands in filters, 425